CLD® FASCIA

NEW ZEALAND
MAY 2007

INSTALLATION MANUAL

James Hardie

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WE VALUE YOUR FEEDBACK

To continuously improve the development of our products and systems, we value your input. Please send any suggestions, including your name, contact details, and relevant sketches to:

Ask James Hardie™
Fax 0800 808 988
literaturefeedback@jameshardie.co.nz

1 INTRODUCTION

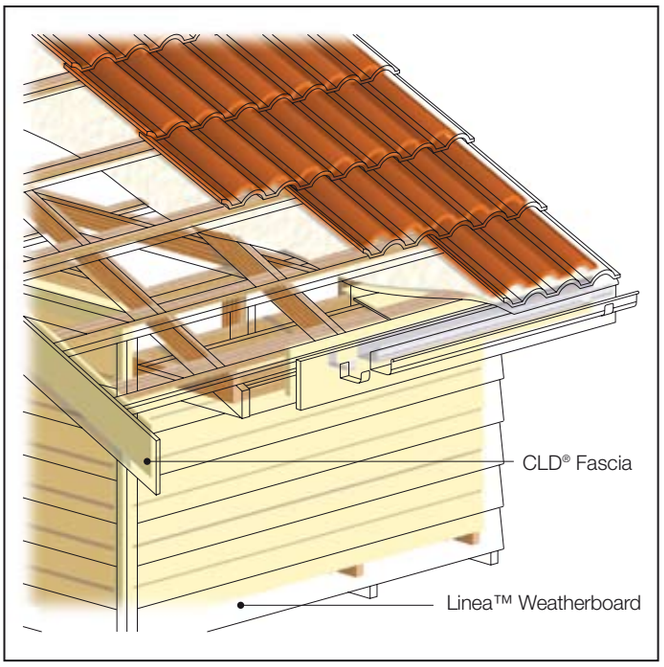
The James Hardie CLD® Fascia is manufactured using James Hardie's patented breakthrough fibre cement technology.

This enables thicker profiles and delivers enhanced durability and stability when compared with the traditional timber alternatives.

CLD Fascia perfectly complements James Hardie's Linea™ Weatherboards or James Hardie Weatherboards for the traditional or contemporary home. CLD fascia and barge are supplied pre-primed with light grey acrylic primer.

CLD Fascia provides the following benefits:

- Resistant to moisture damage and rotting
- Resist cracking, shrinkage and swelling to hold paint longer than wood
- Resistant to fire
- Extended paint warranty available
- Can be painted dark colours
- Easy to install with good workability



CLD Fascia and Barge are both 16mm thick profiles provide easy fit tongue and groove end jointing.

Scope

The specifier or other responsible party for the project must ensure that the information and details in this guide are appropriate for the intended application and that specific design and detailing is undertaken for areas which fall outside the scope of this documentation.

Make sure your information is up to date

When specifying or installing James Hardie products, ensure you have the current manual. If you're not sure you do, or you need more information, visit www.jameshardie.co.nz or Ask James Hardie™ on 0800 808 868.

TABLE 1

CLD FASCIA

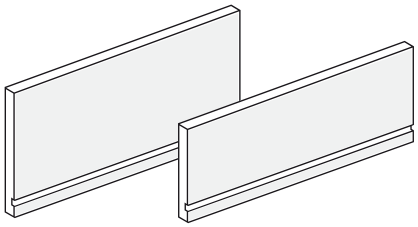
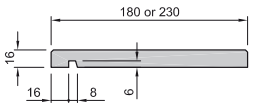
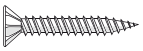
PRODUCT	DESCRIPTION	QUANTITY/SIZE
	**CLD Fascia** Low density fibre cement fascia with eave support groove machined into the back of the board. Ends have tongue and groove feature for easy jointing. 	**CLD Fascia and Barge** Thickness: 16mm Width: 180mm / 230mm Length: 4200mm Approx. mass: 3.5kg/m / 4.5kg/m

TABLE 2

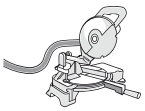
PRODUCT / ACCESSORIES / TOOLS

COMPONENTS SUPPLIED BY JAMES HARDIE

ACCESSORIES	DESCRIPTION	PRODUCT CODE	ACCESSORIES	DESCRIPTION	PRODUCT CODE
	HardiBlade® saw blade Poly diamond blade, for fast, clean cutting of James Hardie fibre cement. Available in 185/260/305mm sizes.	300660		**Fascia screw** 40mm x 9g stainless steel.	303480

COMPONENTS NOT SUPPLIED BY JAMES HARDIE

James Hardie recommends the following products for use in conjunction with its CLD Fascia products. James Hardie does not supply these products and does not provide a warranty for their use. Please contact the component manufacturer for information on their warranties and further information on their products.

ACCESSORIES	DESCRIPTION	ACCESSORIES	DESCRIPTION
	Jolt head nails 3.15 x 60mm galv or stainless steel jolt bullet head nails.		**Compound mitre saw** Dust reducing compound mitre saw used with HardiBlade® saw blade. Makita: LS0714 / LS1013 / LS1212 Hitachi: C10FSB / C10FSM
	Vacuum extraction with HEPA filter Used with HEPA filter and paper bag for reduced dust exposure.		

2 SAFE WORKING PRACTICES

WARNING - DO NOT BREATHE DUST AND CUT ONLY IN WELL VENTILATED AREA

James Hardie products contain sand, a source of respirable crystalline silica which is considered by some international authorities to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) minimise dust when cutting by using either 'score and snap' knife, fibre cement shears or, where not feasible, use a HardiBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) warn others in the immediate area to avoid breathing dust; (4) wear a properly-fitted, approved dust mask or respirator (e.g. P1 or P2) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheets available at www.jameshardie.co.nz. FAILURE TO ADHERE TO OUR WARNINGS, MATERIAL SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

JAMES HARDIE RECOMMENDED SAFE WORKING PRACTICES

CUTTING OUTDOORS

1. Position cutting station so wind will blow dust away from the user or others in working area.
2. Use a dust reducing circular saw equipped with HardiBlade® saw blade and HEPA vacuum extraction.

DRILLING/OTHER MACHINING

When drilling or machining you should always wear a P1 or P2 dust mask and warn others in the immediate area.

IMPORTANT NOTES

1. NEVER use a power saw indoors.
2. NEVER use a circular saw blade that does not carry the HardiBlade® logo.
3. NEVER dry sweep - Use wet suppression or HEPA vacuum.
4. NEVER use grinders.
5. ALWAYS follow tool manufacturers' safety recommendations.

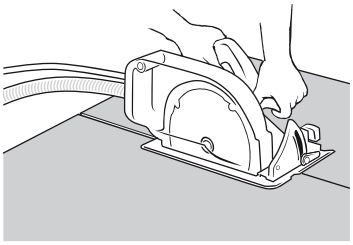
P1 or P2 respirators should be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at www.jameshardie.co.nz to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

WORKING INSTRUCTIONS

Refer to recommended safe working practices before starting any cutting or machining of product.

HARDIBLADE® SAW BLADE

The HardiBlade® saw blade used with a dust-reducing saw connected to a HEPA vacuum is ideal for fast, clean cutting of James Hardie fibre cement products. A dust-reducing saw uses a dust deflector or a dust collector which can be connected to a vacuum system. When sawing, clamp a straight-edge to the sheet as a guide and run the saw base plate along the straight edge when making the cut.



STORAGE AND HANDLING

To avoid damage, all James Hardie building products should be stored with edges and corners of the sheets protected from chipping.

James Hardie building products must be installed in a dry state and protected from weather during transport and storage. The product must be laid flat under cover on a smooth level surface clear of the ground to avoid exposure to water, moisture, etc.

QUALITY

James Hardie conducts stringent quality checks to ensure any product manufactured falls within our quality spectrum. It is the responsibility of the builder to ensure the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying obvious aesthetic surface variations following installation.

3 PREPARATION

PREPARATION
Edges cut on site must be primed before installation with one coat of an oil based masonry primer and then painted (see page 7). Slight chamfering of cut edges is recommended to improve edge paint adhesion.

Do not install CLD Fascia such that it may remain in contact with standing water.

FRAMING
CLD fascia and barge can be fixed to timber framing compliant with NZS 3604. The framing used must comply with the relevant building regulations and standards and the requirements of this manual.

FASTENER DURABILITY
Fasteners must have the appropriate level of durability required for the intended project. This is of particular importance in coastal areas, areas subject to salt spray and other corrosive environments. Fasteners must be fully compatible with all other materials that they are in contact with to ensure the durability and integrity of the assembly. Contact fastener manufacturers for more information.

Use 316 stainless steel fixings in a Sea Spray Zone or (Zone 1 where local area knowledge dictates a higher durability requirement) to comply with the durability requirements of the New Zealand Building Code. Galvanised nails can be used in Zone 1, 2, 3 and 4 as specified by NZS 3604.

FASTENER TYPES
When fastening CLD Fascia to timber rafter ends or sub-fascia use 3.15 x 60mm jolt head nails, or the 40mm x 9g stainless steel Fascia screw supplied by James Hardie.

Fasten gutter supporting brackets to CLD Fascia with the Fascia screws specified above. Do not use nails. When attaching gutter brackets or forming corners or junctions in fascia, only screw/nail through the face, do not screw/nail into edges or ends.

When using jolt head nails, then the heads of the nails need to be finished or punched 2mm below the surface and filled with a water-proof exterior filling compound as per the manufacturer's recommendations. Punch below surface only suitable for bullet head nails. Screws can be finished flush with the board surface.

NOTE
Minimum edge distances for fastener fixing are to be 20mm from an edge and 100mm from the ends.

4 INSTALLATION

RAFTER SPACING ≤600MM CENTRES
When fixing CLD Fascia to rafters at 600mm centres or less, fasten directly to the rafter ends. CLD Fascia is jointed using the 'tongue and groove' ends. Where these joints occur rafter blocking must be used, unless there is already a sub-fascia board. Fix board to blocking at 300mm maximum staggered centres and do not fix within 100mm of the 'tongue and groove' join, see Figure 1.

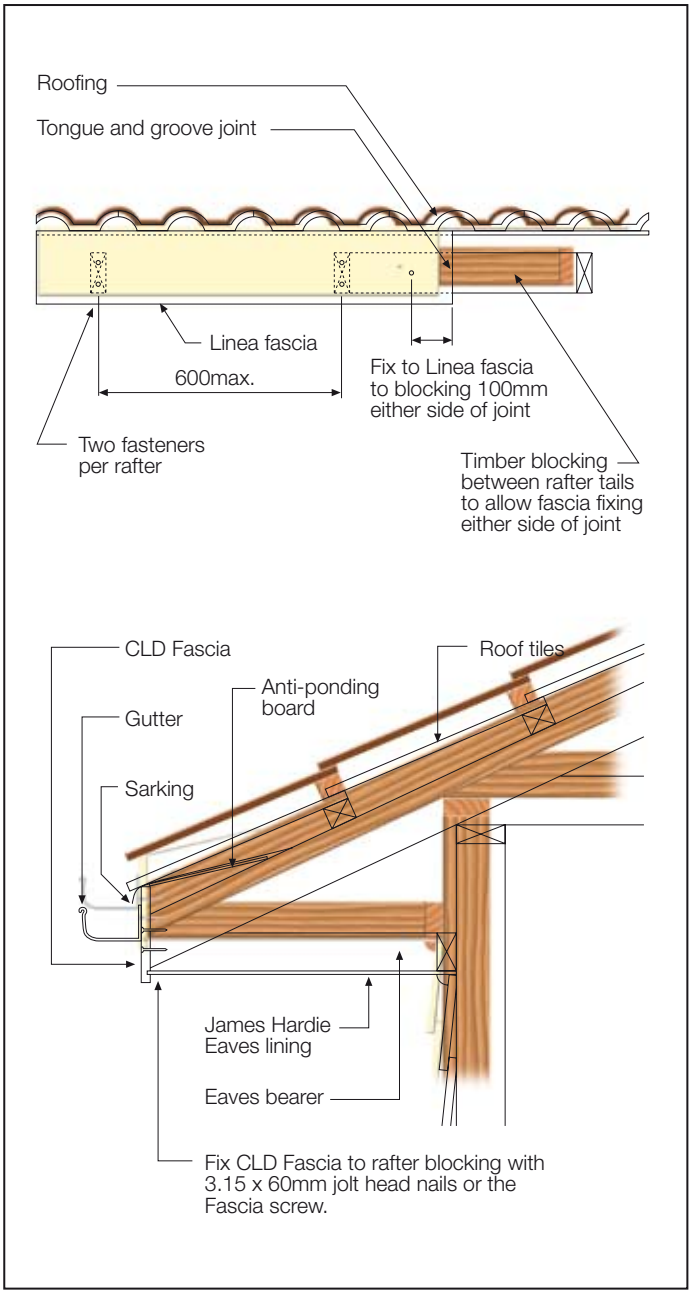

Roofing
Tongue and groove joint
Linea fascia
600max.
Fix to Linea fascia to blocking 100mm either side of joint
Two fasteners per rafter
Timber blocking between rafter tails to allow fascia fixing either side of joint
CLD Fascia
Roof tiles
Anti-ponding board
Gutter
Sarking
James Hardie Eaves lining
Eaves bearer
Fix CLD Fascia to rafter blocking with 3.15 x 60mm jolt head nails or the Fascia screw.

FIGURE 1 FIXING TO RAFTERS AT 600MM CENTRES OR LESS

RAFTER SPACING 600MM - 900MM

For rafters spacing between between 600mm and 900mm the CLD Fascia must be fixed to the rafter ends and also be fixed to a chamfer batten at 300mm maximum spacings. These fixings are required in addition to the fixings into the rafter tails, see Figure 2.

RAFTER SPACING > 900MM

For rafter spacings over 900mm a structurally adequate timber sub-fascia must be used. The sub-fascia is typically a suitably treated exterior grade timber 35mm deep x 120mm high as a minimum.

This sub-fascia must be securely fastened to the rafters and the CLD Fascia is then fixed to it with fasteners at 300mm staggered centres, see Figure 3.

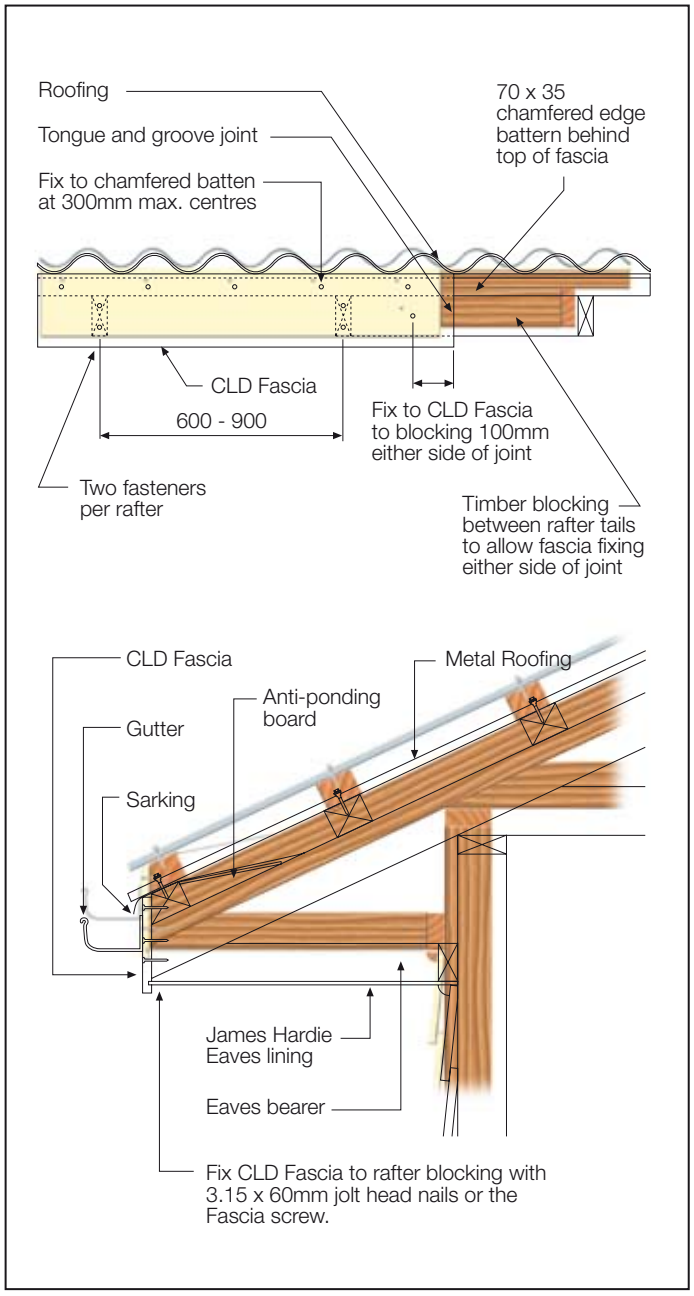

Roofing
Tongue and groove joint
Fix to chamfered batten at 300mm max. centres
70 x 35 chamfered edge batten behind top of fascia
CLD Fascia
600 - 900
Fix to CLD Fascia to blocking 100mm either side of joint
Two fasteners per rafter
Timber blocking between rafter tails to allow fascia fixing either side of joint
CLD Fascia
Metal Roofing
Anti-ponding board
Gutter
Sarking
James Hardie Eaves lining
Eaves bearer
Fix CLD Fascia to rafter blocking with 3.15 x 60mm jolt head nails or the Fascia screw.

FIGURE 2 FIXING TO RAFTERS AT 600MM - 900MM CENTRES OR LESS

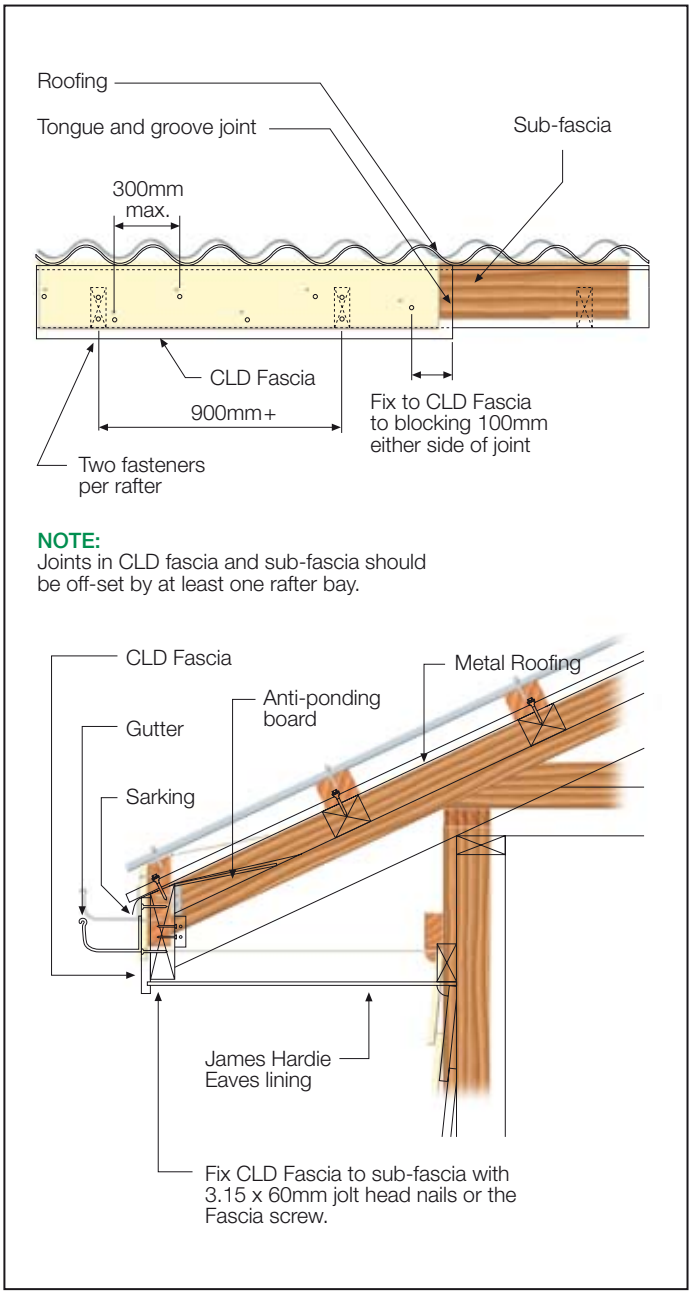

Roofing
Tongue and groove joint
Sub-fascia
300mm max.
CLD Fascia
900mm+
Fix to CLD Fascia to blocking 100mm either side of joint
Two fasteners per rafter
NOTE:
Joints in CLD fascia and sub-fascia should be off-set by at least one rafter bay.
CLD Fascia
Metal Roofing
Anti-ponding board
Gutter
Sarking
James Hardie Eaves lining
Fix CLD Fascia to sub-fascia with 3.15 x 60mm jolt head nails or the Fascia screw.

FIGURE 3 FIXING TO RAFTERS AT 900MM CENTRES OR GREATER

5 PRODUCT INFORMATION

GENERAL

CLD Fascia is a cellulose fibre reinforced cement, low density, building product. The basic composition is Portland cement, ground sand, cellulose fibre and water. CLD Fascia is manufactured to AS/NZS 2908.2 'Cellulose-Cement Products Part 2: Flat Panels' (ISO 8336 'Fibre Cement Flat Panels'). CLD Fascia is classified Type A, Category 2 in accordance with AS/NZS 2908.2. (ISO 8336). For Material Safety Data Panels (MSDS) visit www.jameshardie.co.nz or Ask James Hardie™ on 0800 808 868.

DURABILITY

Resistance to moisture/rotting

CLD Fascia has demonstrated resistance to permanent moisture induced deterioration (rotting) by passing the following tests in accordance with AS/NZS 2908.2:

- Water permeability (Clause 8.2.2)
- Warm water (Clause 8.2.4)
- Heat rain (Clause 6.5)
- Soak dry (Clause 8.2.5)

Resistance to fire

CLD Fascia has the following early fire hazard indices (tested to AS 1530 Part 3).

EARLY FIRE HAZARD INDICES	
Ignition index	0
Flame spread index	0
Heat evolved index	0
Smoke developed index	0 - 1

PAINTING

Refer to the project specification for paint requirements. CLD Fascia must be painted within 3 months of being fixed. James Hardie recommends the application of two coats minimum of a quality exterior grade acrylic paint over the pre-primed boards in accordance with the paint manufacturer's specifications.

Some environments require special coatings. Refer to the paint manufacturer for information and details of their warranty.

PREPARATION AND PRIMING

CLD Fascia must be dry before painting. Flat head nails and screws should be finished flush with the surface of CLD Fascia. Jolt head and T-head nails should be punched and filled 2mm below the surface. Fill the hole with a waterproof exterior grade filler, allow to cure and sand smooth ready for priming. Prime in accordance with paint manufacturer's specifications. Care must be taken not to over-sand as it can affect the finish.

SEALANTS AND STAINING

James Hardie recommends the use of joint sealant and its associated instructions for use.

Stains containing linseed oil are specifically designed for wood and may not be suitable for fibre cement cladding products, primed or un-primed. Semi-transparent stains can vary in uniformity of appearance depending on method of application and conditions and will require a high level of skill and craftsmanship to achieve a uniform appearance. Clear coats have not proven durable in exterior exposure and James Hardie considers them a maintenance item that may require application of a refurbishing sealer at regular intervals. James Hardie does not warrant the appearance or durability of semi-transparent stains and clear coats.

MAINTENANCE

Regular cleaning and maintenance of the paint, finished surface, joints, junctions, penetrations, etc must be carried out at regular intervals. Maintenance must also meet the requirements of the relevant component manufacturer.

6 WARRANTY

James Hardie New Zealand Limited ("James Hardie") warrants for a period of 15 years from the date of purchase that the CLD® Fascia (the "Product"), will be free from defects due to defective factory workmanship or materials and, subject to compliance with the conditions below, will be resistant to cracking, rotting, fire and damage from termite attacks to the extent set out in James Hardie's relevant published literature current at the time of installation. James Hardie warrants for a period of 12 months from the date of purchase that the accessories supplied by James Hardie will be free from defects due to defective factory workmanship or materials.

Nothing in this document shall exclude or modify any legal rights a customer may have under the Consumer Guarantees Act or otherwise which cannot be excluded or modified at law.

CONDITIONS OF WARRANTY

The warranty is strictly subject to the following conditions:

a) James Hardie will not be liable for breach of warranty unless the claimant provides proof of purchase and makes a written claim either within 30 days after the defect would have become reasonably apparent or, if the defect was reasonably apparent prior to installation, then the claim must be made prior to installation;

b) this warranty is not transferable;

c) the Product must be installed and maintained strictly in accordance with the relevant James Hardie literature current at the time of installation and must be installed in conjunction with the components or products specified in the literature. Further, all other products, including coating and jointing systems, applied to or used in conjunction with the Product must be applied or installed and maintained strictly in accordance with the relevant manufacturer's instructions and good trade practice;

d) the project must be designed and constructed in strict compliance with all relevant provisions of the current New Zealand Building Code, regulations and standards;

e) the claimant's sole remedy for breach of warranty is (at James Hardie's option) that James Hardie will either supply replacement product, rectify the affected product or pay for the cost of the replacement or rectification of the affected product;

f) James Hardie will not be liable for any losses or damages (whether direct or indirect) including property damage or personal injury, consequential loss, economic loss or loss of profits, arising in contract or negligence or howsoever arising. Without limiting the foregoing James Hardie will not be liable for any claims, damages or defects arising from or in any way attributable to poor workmanship, poor design or detailing, settlement or structural movement and/or movement of materials to which the Product is attached, incorrect design of the structure, acts of God including but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, efflorescence or performance of paint/coatings applied to the Product, normal wear and tear, growth of mould, mildew, fungi, bacteria, or any organism on any Product surface or Product (whether on the exposed or unexposed surfaces);

g) all warranties, conditions, liabilities and obligations other than those specified in this warranty are excluded to the fullest extent allowed by law;

h) if meeting a claim under this warranty involves re-coating of Products, there may be slight colour differences between the original and replacement Products due to the effects of weathering and variations in materials over time.

DISCLAIMER

The recommendations in James Hardie's literature are based on good building practice, but are not an exhaustive statement of all relevant information and are subject to conditions (c), (d), (f) and (g) above. Further, as the successful performance of the relevant system depends on numerous factors outside the control of James Hardie (eg quality of workmanship and design) James Hardie shall not be liable for the recommendations in that literature and the performance of the relevant system, including its suitability for any purpose or ability to satisfy the relevant provisions of the New Zealand Building Code, regulations and standards.

Ask James Hardie™

Call 0800 808 868

www.jameshardie.co.nz

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